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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,551	03/25/2004	Susann Marie Keohane	AUS920040031US1	7921
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IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER TRAN, TONGOC	
			ART UNIT 2134	PAPER NUMBER
			NOTIFICATION DATE 01/25/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeeiplaw.com

## Office Action Summary

Application No.

10/809,551

Applicant(s)

KEOHANE ET AL.

Examiner

Tongoc Tran

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/25/04 and 8/24/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to Applicant's Application Serial No. 10/809,551 filed on 3/25/2004. Claims 1-20 are pending for examination.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 3/25/2004 and 8/24/2005 has been considered by the Examiner.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1 and 13, the claims recite "perform authorization with the secondary grid resource".

It is unclear which device, the primary resource machine or other device, is performing the authorization.

In the Specification, for example, the Summary of Invention, Applicants disclose "[r]esponsive the proxy certificate, the user machine performs an authorization job on the secondary resource machine". For this reason, Examiner interprets the claimed limitation intended to be performed by the user machine (or *other device*).

With respect to claims 2 and 14, the claims recite "if authorization with the grid resource fails, generating a valid proxy certificate and sending the valid proxy certificate to the primary grid resource" (claim 2) and "means for generating a valid proxy certificate and sending the valid proxy certificate to the primary grid resource if authorization with the grid resource fails; and sending the valid proxy certificate to the primary grid resource" (claim 14).

It is unclear which grid resource (primary or secondary) is Applicants intended to reference to. Furthermore, It is not logical to generate and send a valid proxy certificate if the authorization with the grid resource fails

In the Specification, for example, the Summary of Invention, Applicant discloses "if the authorization with the secondary resource machine is not successful, the user machine generates and returns an invalid proxy certificate". For this reason, Examiner interprets the claimed limitation intended to recite "if authorization with the second grid resource fails, generating an invalid proxy certificate; and sending the invalid proxy certificate to the primary grid resource.

#### ***Claim Rejections - 35 USC § 102***

**4.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-8, 12-16 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Low, M.R. et al., "A Self Authenticating Proxies", 1994, The Computer Journal, Vol. 37, No. 5, hereinafter Low).

With respect to claims 1, 13 and 20, Low discloses a method, apparatus and a computer program product for authorizing offloading of a grid job in a grid computing system, the method comprising:

submitting a grid job to a primary grid resource; responsive to a certificate request from the primary grid resource, identifying a secondary grid resource that is to run the grid job; performing authorization with the secondary grid resource; and if authorization with the grid resource fails, generating an invalid proxy certificate and sending the invalid proxy certificate to the primary grid resource (e.g. *Introduction* and 5. *Delegation of Authority*, e.g. "The notion of cascading SProxies to delegate authority may also be applied to represent combined authority to request an operation...this can be represented by a request from *one* that is endorsed by the *other*")

With respect to claims 2 and 14, Low further discloses:

if authorization with the grid resource fails, generating an invalid proxy certificate; and sending the invalid proxy certificate to the primary grid resource (e.g. 5. *Delegation of Authority*, e.g. this can be represented by a request from *one* that is endorsed by the *other*")

With respect to claims 3 and 15, Low further discloses wherein submitting a grid job to a primary grid resource includes submitting the grid job to a grid scheduler, wherein the grid scheduler selects a primary grid resource and sends the grid job to the primary grid resource (5. Delegation of Authority, e.g. delegation of “work load”).

With respect to claims 4 and 16, Low further discloses wherein identifying a secondary grid resource that is to run the grid job includes submitting a query grid job to the primary grid resource inquiring about an identity of the secondary resource (5. Delegation of Authority, e.g. 5. Delegation of Authority, e.g. “The notion of cascading SAProxies to delegate authority may also be applied to represent combined authority to request an operation...this can be represented by a request from one that is endorsed by the other”)

With respect to claims 6 and 18, Low further discloses wherein performing authorization with the secondary grid resource includes submitting an authorization job to the secondary grid resource (5. Delegation of Authority, e.g. “delegate some of its workload to his junior”).

With respect to claims 7 and 19, Low further discloses wherein the authorization job identifies security elements of the secondary resource (5. Delegation of Authority, e.g. signature (sig.)) .

With respect to claim 8, Low further discloses wherein the authorization job determines *at least one of* an operating system of the secondary grid resource, security updates installed on the secondary grid resource, *whether the secondary resource has a trusted operating system*, whether any conflicting grid jobs are running on the secondary grid resource (e.g. Abstract, "...enabling principals to define and enforce their own protection requirement") .

With respect to claim 12, Low further discloses the method of claim 1, wherein performing authorization with the secondary grid resource includes performing authorization with the secondary grid resource using one or more rules (e.g. Abstract, "...enabling principals to define and enforce their own protection requirement").

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 , 9-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Low, M.R., "A Self Authenticating Proxies", 1994, The Computer Journal, Vol. 37, No. 5) in view of Braddy (U.S. Patent No. 6,304,967).

With respect to claims 5 and 17, Low further discloses wherein identifying a secondary grid resource in the certificate request that is to run the grid job (5. Delegation of Authority, e.g. service or principle). Low does not disclose but Braddy discloses detecting the secondary resource machine by identity its address (Braddy, e.g. col. 10, lines 9-16, "information that identify application server...communication port address"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Braddy's identifying a device by its port address with Low's teaching of identifying a second grid resource device in the certificate request to ensure the remote computer system (secondary resource) is connected to the Request Broker (primary resource) (Braddy, col. 10, lines 9-12).

With respect to claim 9, Low does not disclose but Braddy discloses wherein the authorization job determines whether a given command is disabled on the secondary grid resource (Braddy, e.g. col. 10, lines 15, "whether the Application Server is enabled or disabled"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement determination of a given command is disabled on the secondary grid resource taught by Braddy with performing authentication of secondary grid resource taught by Low to determine whether the Application Server is in connection with the Request Broker (Braddy, col. 10, lines 9-12).

With respect to claims 10 and 11, Low discloses performing authorization with the secondary grid resource but does not disclose but Braddy discloses selection of secondary grid resource includes determining whether the secondary grid resource is included in a black list or white list (Braddy, e.g. col. 6, lines 35-47, e.g. "distribute the request to one of the secondary server computer systems capable of processing the request"; col. 10, e.g. "Directory mapping"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the selection process of Braddy with authentication process of secondary grid resource taught by Low to ensure the application server is capable of handling the request (e.g. Braddy, col. 6, lines 55-59).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-EP 1 282 289 A2 by Yeager discloses mechanism for trusted relationship in decentralized networks including peer-to-peer platforms.

-Low M.R. et al., disclose in "A joint Authorization Schemes" situations where more than one principal needs to give authorization so that a single function can take place.

-Yeager et al. disclose distributed trust mechanism for decentralized networks.

-Ehrsam et al. disclose a cryptographic communication security for multiple domain networks.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (571) 272-3843. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tongoc Tran/  
January 23, 2008